



Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

## Complete if Known

Sheet	1	of	4	Application Number	10/581,571
				Filing Date	July 13, 2007
				First Named Inventor	Prestwich et al.
				Art Unit	1623
				Confirmation No.	6987
				Examiner Name	Goon, Scarlett Y.
				Attorney Docket Number	67934-8006.US00

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	1.	US-5,135,919	08-04-1992	Folkman <i>et al.</i>	
	2.	US-5,290,807	03-01-1994	Folkman <i>et al.</i>	
	3.	US-5,504,074	04-02-1996	D'Amato <i>et al.</i>	
	4.	US-5,616,568	04-01-1997	Pouyani <i>et al.</i>	
	5.	US-5,639,725	06-17-1997	O'Reilly <i>et al.</i>	
	6.	US-5,652,347	07-29-1997	Pouyani <i>et al.</i>	
	7.	US-5,661,143	08-26-1997	D'Amato <i>et al.</i>	
	8.	US-5,698,586	12-16-1997	Kishimoto <i>et al.</i>	
	9.	US-5,733,876	03-31-1998	O'Reilly <i>et al.</i>	
	10.	US-5,792,845	08-11-1998	O'Reilly <i>et al.</i>	
	11.	US-5,854,205	12-29-1998	O'Reilly <i>et al.</i>	
	12.	US-5,854,221	12-29-1998	Cao <i>et al.</i>	
	13.	US-5,861,372	01-19-1999	Folkman <i>et al.</i>	
	14.	US-5,874,417	02-23-1997	Prestwich <i>et al.</i>	
	15.	US-5,885,795	03-23-1999	O'Reilly <i>et al.</i>	
	16.	US-5,892,069	04-06-1999	D'Amato <i>et al.</i>	
	17.	US-5,945,403	08-31-1999	Folkman <i>et al.</i>	
	18.	US-6,017,954	01-25-2000	Folkman <i>et al.</i>	
	19.	US-6,024,688	02-15-2000	Folkman <i>et al.</i>	
	20.	US-6,086,865	07-11-2000	Folkman <i>et al.</i>	
	21.	US-6,174,861	01-16-2001	O'Reilly <i>et al.</i>	
	22.	US-6,521,223	02-18-2003	Calias <i>et al.</i>	
	23.	US-6,534,591	03-18-2003	Rhee <i>et al.</i>	
	24.	US-6,548,081-B2	04-15-2003	Sadozai <i>et al.</i>	
	25.	US-6,551,610	04-22-2003	Shalaby <i>et al.</i>	
	26.	US-6,562,363	05-13-2003	Mantelle <i>et al.</i>	
	27.	US-6,617,450	09-09-2003	Stocker <i>et al.</i>	
	28.	US-6,630,457	10-07-2003	Aeschlimann <i>et al.</i>	
	29.	US-6,635,622	10-21-2003	Tomiyama <i>et al.</i>	
	30.	US-6,656,714	12-02-2003	Holmes <i>et al.</i>	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>2</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	31.	EP-0 045 665-B1	09-04-1985	Szelke <i>et al.</i>		

5574617\_1

1

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

ATL\_IMAGE-5574617-1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.G./

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	10/581,571		
		Filing Date	July 13, 2007		
		First Named Inventor	Prestwich et al.		
		Art Unit	1623		
		Confirmation No.	6987		
		Examiner Name	Goon, Scarlett Y.		
Sheet	2	of	4	Attorney Docket Number	67934-8006.US00

	32.	WO 02/006373-A1	01-24-2002	University of Utah Research Foundation		
	33.	WO 02/090390-A1	11-14-2002	University of Utah Research Foundation		
	34.	WO 04/037164-A1	05-06-2004	University of Utah Research Foundation		

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
	35.	ALMQUIST et al., "Synthesis and biological activity of a ketomethylene analogue of a tripeptide inhibitor of angiotensin converting enzyme", <i>Journal of Medicinal Chemistry</i> , 23:1392-1398 (1980).		
	36.	BENNER, S.A., "Expanding the genetic lexicon: incorporating non-standard amino acids into proteins by ribosome-based synthesis", <i>Trends in Biotechnology</i> , 12:158-163 (1994).		
	37.	CAHILL et al., "Site-Specific Mutagenesis with Unnatural Amino Acids." <i>Trends in Biochemical Sciences</i> , 14(10):400-403 (1989).		
	38.	CAO, Y. et al., "Comparative study of the use of poly(glycolic acid), calcium alginate and pluronics in the engineering of autologous porcine cartilage", <i>J. Biomaterials Sci. Polymer Edn.</i> , 9:475-487 (1998).		
	39.	CHEN, W.Y. and ABATANGELO, G. "Functions of hyaluronan in wound repair", <i>Wound Repair and Regeneration</i> , 7:79-89 (1999).		
	40.	Copy of the International Search report and Written Opinion for PCT application PCT/US2004/040726, search report dated March 31, 2005, 8 pages (2005).		
	41.	HANN J. et al., "On the Double Bond Isostere of the Peptide Bond: Preparation of an Enkephalin Analogue", <i>J.C.S. Perkin Trans 1, The Royal Society of Chemistry</i> , 307-314 (1982)		
	42.	HENNINK and van Nostrum, "Novel crosslinking methods to design hydrogels", <i>Adv. Drug Del. Rev.</i> , 54:13-36 (2002).		
	43.	HOLLADAY et al., "Synthesis of Hydroxyethylene and Ketomethylene Dipeptide Isosteres", <i>Tetrahedron Letters</i> , 24(41):4401-4404 (1983).		
	44.	HOULIHAN P.W. et al, "The relative solution and interfacial hydrophobicity of ethylene oxide-propylene oxide-ethylene oxide block copolymers", <i>Colloids Surfaces</i> , 69:147-153 (1992).		
	45.	HRUBY, V.J., "Conformational restrictions of biologically active peptides via amino acid side chain groups", <i>Life Sciences</i> , 31(3):189-199 (1982).		
	46.	HUDSON, D. et al., "Methionine enkephalin and isosteric analogues. I. Synthesis on a phenolic resin support", <i>International Journal of Peptide and Protein Research</i> , 14(3):177-185 (1979)		
	47.	IBBA and HENNECKE, "Towards engineering proteins by site-directed incorporation in vivo of non-natural amino acids", <i>Biotechnology</i> , 12(7):678-682 (1994)		

5574617\_1

2

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

ATL\_IMAGE-5574617-1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.G./

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/581,571	
			Filing Date	July 13, 2007	
			First Named Inventor	Prestwich et al.	
			Art Unit	1623	
			Confirmation No.	6987	
			Examiner Name	Goon, Scarlett Y.	
Sheet	3	of	4	Attorney Docket Number	67934-8006.US00

48.	IBBA, "Strategies for in vitro and in vivo translation with non-natural amino acids", <i>Biotechnology &amp; Genetic Engineering Reviews</i> , 13:197-216 (1995).	
49.	ISHIKAWA, T. et al., "Novel [2,3]-sigmatropic rearrangement for carbon--nitrogen bond formation", <i>J. Am. Chem. Soc.</i> , 123(31):7734-7735 (2001).	
50.	JAEGER et al. "Predicting optimal and suboptimal secondary structure for RNA", <i>Methods in Enzymology</i> , 183:281-306 (1989).	
51.	JAEGER, J.A. et al., "Improved predictions of secondary structures for RNA", <i>Proc. Natl. Acad. Sci. USA</i> , 86(20):7706-7710 (1989).	
52.	JENNINGS-WHITE and ALMQUIST, R.G., "Synthesis of Ketomethylene Analogs of Dipeptides", <i>Tetrahedron Letters</i> , 23(25):2533-2534 (1982).	
53.	JONES, D.S. et al., "Multivalent poly(ethylene glycol)-containing conjugates for in vivo antibody suppression", <i>Bioconjugate Chem.</i> , 14(6):1067-1076 (2003).	
54.	KNUDSON, C.B. and KNUDSON W., "Cartilage Proteoglycans", <i>Seminars in Cell &amp; Developmental Biology</i> , 12:69-78 (2001).	
55.	LETSINGER, R.L. et al., "Cholesteryl-conjugated oligonucleotides: synthesis, properties, and activity as inhibitors of replication of human immunodeficiency virus in cell culture", <i>Proc Nat Acad Sci USA</i> , 86(17):6553-6556 (1989).	
56.	LI, J. et al., "Surface Properties of Poly(ethylene oxide)-containing copolymers on colloids. Polymeric Materials Science and Engineering; American Chemical Society: Washington D.C., 1993; pages 62-75 (1993)	
57.	LI, H. ET AL., "Synthesis and biological evaluation of a cross-linked hyaluronan-mitomycin C hydrogel", <i>Biomacromolecules</i> , 5(3):895-902 (2004).	
58.	LI, J. et al., "Chemical modification of surface active poly(ethylene oxide)-poly (propylene oxide) triblock copolymers", <i>Bioconjugate Chemistry</i> , 7:592-599 (1996).	
59.	LIU, Y. ET AL., "Crosslinked hyaluronan hydrogels containing mitomycin C reduce postoperative abdominal adhesions", <i>Fertility and Sterility</i> , 83(4):1275-1283 (2004).	
60.	LIU, Y. ET AL., "Disulfide Crosslinked hyaluronan-gelatin sponge: growth of fibrous tissue iv vivo", <i>J. Biomed. Materials</i> , 68A:142-149 (2004).	
61.	MORLEY, J., "K+ channel openers and suppression of airway hyperreactivity", <i>Trends Pharm Sci.</i> , 15(12):463-468 (1994).	
62.	NEEDLEMAN, S.B. and WUNSCH, C.D., "A general method applicable to the search for similarities in the amino acid sequence of two proteins", <i>J. Mol. Biol.</i> , 48(3):443-453 (1970)	
63.	NEFF, J. et al., "A novel method for surface modification to promote cell attachment to hydrophobic substrates", <i>J. Biomed. Mater Res.</i> , 40(4):511-519 (1998).	
64.	PEARSON and LIPMAN, "Improved tools for biological sequence comparison", <i>Proc. Natl. Acad. Sci. U. S. A.</i> , 85(8):2444-2448 (1988)	

5574617\_1

3

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

ATL\_IMAGE-5574617-1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.G./

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/581,571
				Filing Date	July 13, 2007
				First Named Inventor	Prestwich et al.
				Art Unit	1623
				Confirmation No.	6987
				Examiner Name	Goon, Scarlett Y.
Sheet	4	of	4	Attorney Docket Number	67934-8006.US00

65.	PRASAD, K. ET AL., "Surface Activity and Association of ABA Polyoxyethylene-polyoxypropylene Block Copolymers in Aqueous Solution", <i>Journal of Colloid and Interface science</i> , , 69(2):225-232 (1979).	
66.	RIZO, J. and GIERASCH, L.M., "Constrained peptides: models of bioactive peptides and protein substructures", <i>Ann. Rev. Biochem.</i> , 61:387-418 (1992).	
67.	SHU, X.Z. et al., "Attachment and Spreading of Fibroblasts on an RGD Peptide-Modified Injectable Hyaluronan Hydrogel", <i>J.Biomed.Mater. Res.</i> , 68A:365-375(2004).	
68.	SHU, X.Z. et al., "Disulfide Crosslinked Hyaluronan Hydrogels", <i>Biomacromolecules</i> , 3:1304-1311 (2002).	
69.	SHU, X.Z. et al., "Disulfide-Crosslinked Hyaluronan-Gelatin Hydrogel Films: A Covalent Mimic of the Extracellular Matrix for in vitro Cell Growth", <i>Biomaterials</i> , 24:3825-3834 (2003).	
70.	SHU, X.Z. et al., "In situ Crosslinkable Glycosaminoglycan Hydrogels for Tissue Engineering", <i>Biomaterials</i> , 25:1339-1348 (2004).	
71.	SMITH, T.F. and WATERMAN, M.S., "Comparison of Biosequences", <i>Advances in Applied Mathematics</i> , 2: 482-489 (1981).	
72.	SPATOLA, A. F. in Chemistry and Biochemistry of Amino Acids, Peptides, and Proteins, B. Weinstein, eds. , Marcel Dekker, New York, Chapter 5, pgs 267-319 (1983).	
73.	SPATOLA, A.F. et al., "Structure-activity relationships of enkephalins containing serially replaced thiomethylene amide bond surrogates", <i>Life Sciences</i> , 38:1243-1249 (1986).	
74.	T. E. CREIGHTON, <i>Proteins: Structure and Molecular Properties</i> , "Posttranslational Covalent Modifications of Polypeptide Chains", W. H. Freeman & Co. , San Francisco pp 78-86 (1983).	
75.	THORSON et al., "A Biosynthetic Approach for the Incorporation of Unnatural Amino Acids into Proteins", <i>Methods in Molecular Biology</i> , 77:43-73 (1991).	
76.	TOOLE, B.P. "Hyaluronan in morphogenesis", <i>Seminars in Cell &amp; Developmental Biology</i> , 12:79-87 (2001).	
77.	TOYOKUNI, T. et al., "Synthesis of a new heterobifunctional linker, N-[4-(aminooxy)butyl]maleimide, for facile access to a thiol-reactive 18F-labeling agent", <i>Bioconjugate Chem</i> , 14(6):1253-1259 (2003).	
78.	WEBB, K. et al., "A novel surfactant-based immobilization method for varying substrate-bound fibronectin", <i>J. Biomed. Mater. Res.</i> , 54(4):509-518 (2001).	
79.	ZOLLER, M.J., "New recombinant DNA methodology for protein engineering", <i>Current Opinion in Biotechnology</i> , 3(4):348-354 (1992).	
80.	ZUKER, M., "On finding all suboptimal foldings of an RNA molecule", <i>Science</i> , 244(4900):48-52 (1989).	

5574617\_1

4

Examiner Signature	/Scarlett Goon/	Date Considered	10/05/2010
--------------------	-----------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

ATL\_IMAGE-5574617\_1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.G./